<u>REMARKS</u>

Claims 1-77 and 103 are currently pending in the present application. Claims 1-2, 8, 14, 23, and 45 have been amended. Applicant respectfully requests reconsideration of the pending claims in view of the following remarks.

<u>Claim Rejections – 35 U.S.C. § 103</u>

The Examiner rejected Claims 1-19 and 21-22 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 4,660,168 ("Grant") in view of U.S. Patent No. 5,799,288 ("Tanaka") and Official Notice.

Grant does not disclose the subject mater of amended independent Claim 1. More specifically, Grant does not disclose a method of managing an ATM comprising at least the following elements:

(a)   receiving from the ATM, a first amount of currency in each of the receptacles between the empty currency amount and the full currency amount;

(b)   storing the first amount of currency in each of the receptacles in a memory associated with the processor;

(c)   receiving from the ATM, a second amount of currency in each of the receptacles;

(d)   storing the second amount of currency in each of the receptacles in the memory associated with the processor;

(e)   receiving a query of the processor from a user interface for a real-time amount of currency in each of the receptacles; and

(f)   displaying data corresponding to the second amount of currency in each of the receptacles in response to the query.

Rather, Grant discloses an "apparatus…for reducing customer transaction time in an automated teller machine (ATM)…." Abstract. In particular, the apparatus disclosed in Grant includes "'smart' or intelligent peripherals associated with the ATM and a novel task handling system. … Each of the peripheral devices includes a subsystem controller having a dedicated processor and memory for facilitating parallel transaction event processing among the devices." Col. 2, lines 29-38. For example, as disclosed in Grant, "after a card is detected by the card handler mechanism, the ATM may simultaneously perform the following command/request events: printing header information on the customer receipt, retrieving card data form the encoded magnetic stripe and requesting the customer to enter his/her personal identification number. Likewise, after PIN entry and validation, and transaction selection and host

authorization, the ATM may perform the following command/request events simultaneously: printing the transaction description on the print receipt and dispensing currency." Col. 2, lines 56-67.

Grant merely discloses using dedicated processors associated with ATM peripherals in order to perform parallel event processing. Grant makes no mention whatsoever of receiving data from an ATM corresponding to currency held in the ATM, and, furthermore, Grant makes no mention whatsoever of monitoring or recording the amount of currency held in an ATM or a receptacle of an ATM.

The Examiner cites to column 8, lines 1-2 as disclosing "storing the second data in the memory associated with the processor." This section of Grant cited by the Examiner merely states that "each of the subsystem controllers 94-102 include a dedicated processor and memory for controlling peripheral devices associated with the ATM." Col. 7, lines 67-68 and Col. 8, lines 1-2. The mere fact that Grant discloses a processor and memory does not teach storing data indicating an amount of currency held in the ATM in memory.

In addition, Grant does not disclose "receiving a query of the processor from a user interface for a real-time amount of currency in each of the receptacles," as recited in Claim 1. There is no indication in Grant that the apparatus can accommodate a query for data. In addition and as noted above, Grant makes no mention whatsoever of recording or receiving data indicating a real-time amount of money held in an ATM. Therefore, Grant clearly does not disclose receiving a query for a real-time amount of money held in an ATM.

The Examiner cites to column 14, lines 10-55 and Figs. 6-7 of Grant as disclosing "receiving a query of the processor from a user interface for a real-time amount of currency in each of the receptacles." However, this section of Grant merely discloses events that occur during a transaction with a customer and which events can be paired in order to provide parallel processing. None of the events disclosed in this section relate to receiving a query for a history of an amount of money held in an ATM at a particular time.

Tanaka does not cure the deficiencies of Grant. Tanaka does not disclose a method of managing an ATM comprising at least the following elements:

(a)   receiving from the ATM, a first amount of currency in each of the receptacles between the empty currency amount and the full currency amount;

(b)   storing the first amount of currency in each of the receptacles in a memory associated with the processor;

(c)   receiving from the ATM, a second amount of currency in each of the receptacles;

(d)   storing the second amount of currency in each of the receptacles in the memory associated with the processor;

(e)   receiving a query of the processor from a user interface for a real-time amount of currency in each of the receptacles; and

(f)   displaying data corresponding to the second amount of currency in each of the receptacles in response to the query.

Rather, Tanaka discloses "a remaining money management system wherein demanded numbers of different currencies for an ATM can be predicted and managed to achieve reduction of the amount of money to be loaded into the ATM and reduction of the burden to a staff member." Col. 1, lines 43-48. "The remaining money management apparatus 2 includes a storage section 2A for cumulatively storing transaction data from the ATMs 1 and a prediction section 2B for calculating and predicting demanded cash amounts within a designated period of time for the ATMs 1 based on the transaction data in the past stored in the storage section 2A." Col. 5, lines 11-16.

The remaining money management system 2 includes a terminal 18. Col. 14, lines 22-29. The terminal 18 includes "a pair of LLC drivers 18A, a LAN controller 18B, a data communication controller 18C, a remaining money management controller 18D, a remaining money management library 18E, a cash amount management section 18F, a hard disk 18G, ..." Col. 14, lines 58-65. The remaining money management controller 18D includes "a remaining money management section 18d for delivering an instruction for prediction to the remaining money management library 18E in response to screen inputting processing ... by a staff member and controlling the screen display of a result of prediction processing." Col. 15, lines 29-35. Further, "the remaining money management library (prediction section) 18E performs calculation of remaining money in the ATMs 11 to 13 or prediction of cash amounts demanded by the ATMs 11 to 13 in response to an instruction from the remaining money management section 18d. The remaining money management library 18E has a function of writing, after transaction data are collected from the ATMs 11 to 13, the transaction data into a predetermined area of the hard disk 18G ... and another function of calculating and predicting, after a prediction period is designated by screen inputting processing by a staff member, demanded cash amounts within the prediction period based on transaction data of the ATMs 11 to 13 in the past stored in the hard disk 18G." Col. 15, lines 40-53. The transaction data is collected based on a "timer monitor processing loop and discriminates whether or not a data

collection time comes. … After each 10 minutes comes, the data communication controller 18C transmits a data collection inquiry to the ATMs 11 to 13." Col. 18, lines 1-15.

The main controller 18a analyzes the data received from each of the ATMs 11 to 13 and discriminates whether or not the received data is transaction data. When the received data is transaction data, the main controller 18a passes over the transaction data to the remaining money management library 18E via the remaining money management section 18d. Col. 18, lines 16-28.

The remaining money management library 18E analyzes the received transaction data and distributes the transaction data in accordance with a result of the analysis. When the received transaction data is apparatus remaining money information, the transaction data is passed over to the cash amount management section 18F. The transaction data is written into the in-apparatus remaining money information storage area (refer to FIG. 4) of the hard disk 18G by the cash amount management section 18F. Col. 18, lines 29-46.

The remaining money management library 18E writes transaction data of the ATMs 11 to 13, such as "remaining amounts in the apparatus: ten thousand yen bill/five thousand yen bill/one thousand yen bill/coins" into the hard disk 18G. Col. 15, line 66 – col. 16, line 4. "Since data of the day are not used for prediction, contents of the data of 2 to 6 collected on the day are stored as they are into the day demanded currency number storage area, and then, after the data changes, they are saved into the past demanded currency number storage area." Col. 16, lines 32-36.

There is no indication in Tanaka that the ATM 1 or terminal 18 is queried as established by a user interface for a real-time amount of currency in the receptacles of the ATM. In addition, there is no indication in Tanaka that the real-time amount of currency in the receptacles in the ATM is displayed to a user in response to the query. FIGS. 20-21 of Tanaka illustrate "a display of a result of demanded cash amount prediction of the remaining money management system." Col. 3, lines 6-8. It appears that the terminal 18 allows a staff member to control when the remaining money management system 2 performs the prediction calculation for predicting demanded cash amounts within a designated period of time for the ATMs 1 based on the past transaction data stored in the hard disk 18G. Col. 20, lines 42-51. The focus of the remaining money management system of Tanaka is to maintain a proper future amount (i.e., not too much and not too little) of cash in the ATM based on the particular demands of the ATM.

As specifically noted in Tanaka, the remaining money management system "predicts the demanded amounts of bills (demanded amounts of money) which are predicted to be consumed

by customers using a prediction method called Hayashi's quantization theory." Col. 17, lines 17-21. "The prediction method predicts quantitative data (demanded amounts of money) from qualitative data (qualitative factors) such as a day of the week, the date or the like." Col. 17, lines 23-26. More specifically, "a total average value of demanded amounts of money in the past are calculated based on transaction data in the past stored on the hard disk 18G and for each qualitative factor (day of the week, date, a specific day or the like) which may have an influence on the demanded amounts of money, a degree of influence of the qualitative factor on the demanded amounts of money is converted into a numerical value in advance. Col. 17, lines 27-34.

Although past transaction data is used in the prediction calculation of future currency amounts, the past transaction data is irrelevant and of no use to the staff member or user of the terminal 18. Accordingly, as confirmed by the disclosure and figures 20-21, Tanaka does not query for or display a real-time amount of currency in the receptacles of the ATM.

On page 4 of the present Office action, the Examiner takes Official Notice "that of the processor from a user interface and displaying is old and well known in the banking industry as a convenient to provide customer efficient or better quality service. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included of the processor from a user interface and displaying to method of managing an ATM."

Applicant respectfully disagrees. Not all data can be or is displayed, nor is all data subject to a query. Accordingly, Applicant respectfully requests the Examiner to present suitable prior art for these claimed elements.

In addition, Grant and Tanaka cannot be combined. The Examiner indicates on page 4 of the present Office action that "it would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to [include the elements of Tanaka with] Grant et al. because Tanaka et al. teaches that adding the features help to achieve reduction of the amount of money to be loaded in the ATM and reduction of burden to a staff member (column 1, lines 43-48)."

Applicant respectfully disagrees. Although the Examiner's statement regarding the potential benefits (i.e., reduction of the amount of money to be loaded in the ATM and reduction of burden to a staff member) of the Tanaka remaining money management system may be true with respect to the ATM of Tanaka, the ability of a person of ordinary skill in the art of ATMs to combine the required software processing and hardware of Tanaka with Grant may not operate as Tanaka intends. The disclosure of Grant merely focuses on providing parallel processing of an ATM transaction for quick performance for the user. There is no indication in Grant that

additional processing to determine future amounts of currency as in Tanaka is desirable, would be operable, or would provide a predictable result.

For at least these reasons, Grant and Tanaka do not disclose the subject matter of independent Claim 1. Accordingly, independent Claim 1 is allowable. Claims 2-22 depend from Claim 1, and are allowable for at least the reasons Claim 1 is allowable.

Independent Claims 23 and 45 have been similarly amended as independent Claim 1. Accordingly, independent Claims 23 and 45 are allowable for similar reasons that Claim 1 is allowable and discussed above. The respective dependent Claims 24-44 and 46-65 are also allowable for at least the reasons discussed above.

The Examiner rejected Claim 20 under 35 U.S.C. § 103 as being unpatentable over Grant, Tanaka, and Official Notice, and further in view of U.S. Patent No. 5,386,104 ("Sime").

Claim 20 depends from Claims 1 and 19 and is allowable for at least the reasons Claim 1 is allowable. Claim 20 further specifies wherein the first and second data include data identifying the ATM and wherein the data identifying the ATM includes location information of the ATM.

As noted above, the combination of Grant, Tanaka and Official Notice do not disclose the subject matter of independent Claim 1. Sime does not cure the deficiencies of Grant, Tanaka, and Official Notice. Sime discloses an automated teller system including a fraud detection module which uses a biometric recognition technique. Abstract. The section of Sime cited by the Examiner merely states that "other conventional modules included in each ATM 10 include ... environmental data source means 30 for providing data as to the time and date of a transaction together with the location of the ATM 10 ... ." This section does not indicate that the location data of the ATM appears on a display in response to a query of the ATM. In fact, there is no further mention of the environmental data source means 30 anywhere else in Sime so it is not clear how the means 30 is used.

For at least these reasons, dependent Claim 20 is allowable.

The Examiner rejected Claim 66 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,109,522 ("Force"), Tanaka, and Official Notice, and further in view of U.S. Patent No. 5,093,901 ("D'Agosto").

As noted by the Examiner on page 12 of the present Office action, Force does not disclose the following elements of independent Claim 66:

(a) sending from the ATM to the processor at least one of data corresponding to currency amounts in the ATM and status signals corresponding to ATM operation;

(b) updating the schedule information of the courier in response to at least one of the data received and the status signals received by the processor; and

(c) sending the updated schedule information from the processor to the at least one courier.

Force also does not disclose the following elements of independent Claim 66:

(d) providing a processor configured to establish communication with at least one courier service and with at least one ATM;

(e) retrieving data corresponding to at least one courier service from the processor, wherein the data includes courier information and schedule information of the courier;

Rather, Force discloses "an automated banking machine that enables currency bills, notes or other documents deposited by one customer to be identified and stored in the machine, and later selectively dispensed to another customer." Col. 1, lines 10-15. "Currency notes, ... that are commonly dispensed by ATMs, are generally housed in the machine in removable canisters." Col. 1, lines 43-45. "The replacement or resupply of canisters often requires transporting filled canisters to the machine and returning partially depleted canisters to a remote location. While efforts have been made in the design of canisters to minimize opportunities for pilferage, there is always some risk. Therefore such activities are normally carried out by armed couriers." Col. 1, lines 57-63.

Force further discloses that "each canister has a programmable memory thereon." Col. 33, lines 53-54. The memory 626 in the canister can include "1. Information about the contents of the storage areas in the canister. 2. Maintenance and status information. 3. Calibration information. 4. Security and tracking information." Col. 33, line 61 – col. 34, line 1. A control system 30 of the automated banking machine "responds to the information stored in the canister memory 626 and tailors the operation of the machine in accordance therewith." Col. 36, lines 56-59.

There is no indication in Force of a processor configured to establish communication with at least one courier service and with at least one ATM. Although courier service data may be included in the memory 626 on the canister, a communication link between at least a processor and the courier service is not disclosed in Force. Because there is no communication link with the courier service, data corresponding to at least one courier service from the processor cannot be retrieved as specified in Claim 66.

Tanaka does not cure the deficiencies of Force. As inferred from page 12 of the present Office action, Tanaka does not disclose at least the following elements of independent Claim 66:

(d) providing a processor configured to establish communication with at least one courier service and with at least one ATM;

(e) retrieving data corresponding to at least one courier service, wherein the data includes courier information and schedule information of the courier;

(b) updating the schedule information of the courier in response to at least one of the data received and the status signals received by the processor; and

(c) sending the updated schedule information from the processor to the at least one courier.

D'Agosto does not cure the deficiencies of Force and Tanaka. D'Agosto does not disclose at least the following elements of Claim 66:

(d) providing a processor configured to establish communication with at least one courier service and with at least one ATM;

(e) retrieving data corresponding to at least one courier service, wherein the data includes courier information and schedule information of the courier;

(a) sending from the ATM to the processor at least one of data corresponding to currency amounts in the ATM and status signals corresponding to ATM operation;

(b) updating the schedule information of the courier in response to at least one of the data received and the status signals received by the processor; and

(c) sending the updated schedule information from the processor to the at least one courier.

Rather, D'Agosto discloses a telephone terminal or a combined telephone-dictation terminal. Abstract. The telephone terminal can include an "optional feature ...[where] one of the programmable keys can be programmed to switch the transceiver unit 10 into the voice recognition mode in which a voice recognition circuit, which is 'trained' to recognize the user's voice, converts sounds spoken into the microphone of the handset 14 into signals representing words or alphanumeric characters which are displayed on the display 16 and sent to the personal computer." Col. 9, lines 10-24.

The Examiner indicates that elements (b) and (c) listed above are disclosed in D'Agosto at column 9, lines 25-43. This section states

> [t]he voice recognition mode also can be used to input data to the personal computer to update directories, appointments, and other information stored in the computer. Although a keyboard could be connected to the transceiver unit 10 to accomplish the same functions, this is not desirable because of the cost of the

keyboard, the space it would take in the user's desk, and the relative slowness of that mode of operation due to the fact that the user may not be skilled or practiced in keyboard operation. Therefore, the voice recognition features provide more versatile operation without the use of the hands, except to operate the appropriate programmable key. The programmable keys also can be programmed to transmit data to the personal computer. For example, changes or additions in a telephone directory, a list of appointments, or the like can be transmitted to the personal computer by this means.

Clearly, D'Agosto is not related to ATMs or even banking systems. Clearly, D'Agosto does not disclose "updating the schedule information of the courier in response to at least one of the data received and the status signals received by the processor" or "sending the updated schedule information from the processor to the at least one courier." The ability to program a telephone to a voice recognition mode and to transmit data from the telephone to a computer seem to be irrelevant with respect to the subject matter of Claim 66.

On page 13 of the present Office action, the Examiner takes Official Notice "that from the processor is old and well known in the banking industry as a convenient to provide client/individual efficient or better quality service. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have included from the processor to method of managing an ATM."

Applicant respectfully disagrees. Not all data or information comes from a processor. Accordingly, Applicant respectfully requests the Examiner to present suitable prior art for this claimed element.

In addition, Force, Tanaka, and D'Agosto cannot be combined. Force provides no reasoning or desirability of including additional processing to predict future amounts of currency for an ATM as in Tanaka. Furthermore, there is no indication that the banking system of Force would operate as Tanaka intended or predicted.

For at least these reasons, Force, Tanaka, and D'Agosto do not disclose the subject matter of independent Claim 66. Accordingly, independent Claim 66 is allowable. Claims 67-77 depend from Claim 66, and are allowable for at least the reasons Claim 66 is allowable.

CONCLUSION

In view of the foregoing, entry of this Amendment and allowance of the pending claims are respectfully requested. The undersigned is available for telephone consultation during normal business hours.

Respectfully submitted,

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